

WHAT WE CLAIM IS:

1. A defective pixel detector adapted to detect a defective pixel contained in pixel data produced out of a solid-state imaging device, characterized by comprising a normal pixel detection means for detecting out a normal pixel from said pixels, and a defective pixel detection means for detecting a defective pixel out of pixels that are not factored out by said normal pixel detection means.

2. A defective pixel detector as recited in claim 1, characterized in that said normal pixel detection means comprises a level difference calculation means adapted to calculate a level difference between the pixel to be inspected and an neighboring pixel, and a comparison means adapted to compare said level difference with a first threshold, so that when said level difference is less than said first threshold, the pixel to be inspected is determined as normal.

3. A defective pixel detector as recited in claim 1, characterized in that said normal pixel detection means comprises a level difference calculation means adapted to calculate level differences between the pixel to be inspected and a plurality of neighboring pixels, a comparison means adapted to compare each of said plurality of level differences calculated at said level difference calculation means with a first threshold, and a determination block adapted to calculate the number of neighboring pixels at which said level difference is less than said first threshold, and to compare the number of

neighboring pixels calculated by said calculation with a second threshold, so that when said number of neighboring pixels is greater than said second threshold, the pixel to be inspected is determined as normal.

5 4. A defective pixel detector as recited in any one of claims 1 to 3, characterized in that said normal pixel detection means has a memory for holding the pixel to be inspected, which also works as a memory of said defective pixel detection means.

10 5. A defective pixel detector as recited in any one of claims 1 to 4, characterized in that said defective pixel detection means advances to a low power consumption mode with clocks stopped when the pixel to be inspected is determined at said normal pixel detection means as normal.

15 6. A defective pixel detection process, characterized by comprising the steps of:

 detecting a normal pixel out of pixel data produced out of a solid-state imaging device,

 factoring out said detected normal pixel, and

20 detecting a defective pixel out of pixels from which said normal pixel has been factored out.

 7. A defective pixel detection process as recited in claim 6, characterized in that at the step of detecting said normal pixel, a level difference between the pixel to be inspected and a neighboring pixel is calculated, and
25 the level difference calculated by said calculation is compared with a first threshold, so that the pixel to be inspected is determined as normal when, as a result of

said comparison, the level difference is less than the first threshold.

8. A defective pixel detection process as recited in claim 6, characterized in that at the step of detecting
5 said normal pixel, level differences between the pixel to be inspected and a plurality of neighboring pixels are calculated; said plurality of level differences found by said calculation are each compared with a first threshold; from results of said comparisons, the number of
10 neighboring pixels at which said level differences are less than said first threshold is calculated; and the number of neighboring pixels found by said calculation is compared with a second threshold, so that when said number is greater than said second threshold, the pixel to be
15 inspected is determined as normal.

9. An imaging system comprising a defective pixel detector adapted to detect a defective pixel contained in pixel data produced out of a solid-state imaging device, characterized in that said defective pixel detector
20 comprises a normal pixel detection means for detecting out a normal pixel from said pixels, and a defective pixel detection means for detecting a defective pixel out of pixels that are not factored out by said normal pixel detection means.

25 10. An imaging system as recited in claim 9, characterized in that said normal pixel detection means comprises a level difference calculation means adapted to calculate a level difference between the pixel to be

inspected and an neighboring pixel, and a comparison means adapted to compare said level difference with a first threshold, so that when said level difference is less than said first threshold, the pixel to be inspected is
5 determined as normal.

11. An imaging system as recited in claim 9, characterized in that said normal pixel detection means comprises a level difference calculation means adapted to calculate level differences between the pixel to be
10 inspected and a plurality of neighboring pixels, a comparison means adapted to compare each of said plurality of level differences calculated at said level difference calculation means with a first threshold, and a determination block adapted to use the result of
15 comparison at said comparison means to calculate the number of neighboring pixels at which said level difference is less than said first threshold, and to compare the number of neighboring pixels calculated by said calculation with a second threshold, so that when
20 said number of neighboring pixels at which the said level difference is less than said first threshold is greater than said second threshold, the pixel to be inspected is determined as normal.